

**WHAT IS CLAIMED IS:**

1       1. A method of operating a radio access network of a telecommunications  
2 system, the method comprising using a omnibus release message to release plural  
3 connections handled by the radio access network.

1       2. The method of claim 1, wherein the radio access network comprises a radio  
2 network control (RNC) node, and wherein the method further comprises:  
3       preparing the omnibus release message whereby, when a first selected parameter  
4 thereof has a predetermined value, all radio connections controlled by the radio network  
5 control (RNC) node are released.

1       3. The method of claim 2, wherein when the first selected parameter is in a  
2 reserved range of values, all radio connections controlled by the radio network control  
3 (RNC) node are released.

1       4. The method of claim 2, wherein the radio network control (RNC) node is a  
2 serving radio network control (SRNC) node, and further comprising preparing the  
3 omnibus release message upon failure of the serving radio network control (SRNC)  
4 node.

1       5. The method of claim 2, wherein the first selected parameter is included in a  
2 mobile terminal global identity information element of the omnibus release message.

1       6. The method of claim 5, wherein the first selected parameter is included in a  
2 Radio Network Temporary Identity (U-RNTI) information element of the omnibus  
3 release message.

1       7. The method of claim 6, wherein the first selected parameter is a Serving  
2 Radio Network Temporary Identity (S-RNTI) information element of the omnibus  
3 release message.

1       8. The method of claim 1, wherein the radio access network comprises a radio  
2 network control (RNC) node, and wherein the method further comprises:

3 preparing the omnibus release message whereby, when a first selected parameter  
4 thereof has a first predetermined value and a second selected parameter thereof has a  
5 second predetermined value, all radio connections in cells controlled by the radio  
6 network control (RNC) node are released.

1 9. The method of claim 8, wherein when the first selected parameter is in a first  
2 reserved range of values, all radio connections in cells controlled by the radio network  
3 control (RNC) node are released.

1 10. The method of claim 8, wherein when the second selected parameter is in a  
2 second reserved range of values, all radio connections in cells controlled by the radio  
3 network control (RNC) node are released.

1 11. The method of claim 8, wherein the radio network control (RNC) node is a  
2 drift radio network control (DRNC) node, and further comprising preparing the  
3 omnibus release message upon failure of the drift radio network control (DRNC) node.

1 12. The method of claim 8, wherein the first selected parameter is included in a  
2 mobile terminal global identity information element of the omnibus release message.

1 13. The method of claim 12, wherein the first selected parameter is included in a  
2 Radio Network Temporary Identity (U-RNTI) information element of the omnibus  
3 release message.

1 14. The method of claim 13, wherein the first selected parameter is in a Serving  
2 Radio Network Temporary Identity (S-RNTI) information element of the omnibus  
3 release message.

1 15. The method of claim 8, wherein the second selected parameter is included in  
2 a parameter which identifies a serving radio network control (SRNC) node.

1 16. The method of claim 1, further comprising transmitting the omnibus release  
2 message on a common control channel (CCCH) when a mobile terminal is in a  
3 CELL\_FACH state.

1           17. The method of claim 1, further comprising transmitting the omnibus release  
2 message on a paging channel (PCH).

1           18. The method of claim 1, wherein the radio access network comprises a  
2 serving radio network controller node and a drift radio network controller node, and  
3 wherein the method further comprises:

4           sending from the serving radio network controller node to the drift radio network  
5 controller node a request for release of connections with mobile terminals controlled by  
6 the serving radio network controller node in cells controlled the drift radio network  
7 controller node;

8           sending the omnibus release message from the drift radio network controller  
9 node to base station(s) controlled by the drift radio network controller node.

1           19. The method of claim 1, wherein the radio access network comprises a  
2 serving radio network controller node and a drift radio network controller node, and  
3 wherein the method further comprises:

4           receiving at the drift radio network controller node an indication of a loss of  
5 connection with the serving radio network controller node;

6           sending the omnibus release message from the drift radio network controller  
7 node to base station(s) controlled by the drift radio network controller node with respect  
8 to connections with mobile terminals controlled by the serving radio network controller  
9 node in cells controlled the drift radio network controller node.

1           20. A radio access network of a telecommunications system, radio access  
2 network comprising a radio network control (RNC) node which prepares a omnibus  
3 release message to release plural connections handled by the radio access network.

1           21. The radio access network of claim 20, wherein when a first selected  
2 parameter of the omnibus release message has a predetermined value, all radio  
3 connections controlled by the radio network control (RNC) node are released.

1           22. The radio access network of claim 21, wherein when the first selected  
2 parameter is in a reserved range of values, all radio connections controlled by the radio  
3 network control (RNC) node are released.

1           23. The radio access network of claim 21, wherein the radio network control  
2 (RNC) node is a serving radio network control (SRNC) node, and wherein the serving  
3 radio network control (SRNC) node prepares the omnibus release message upon failure  
4 of the serving radio network control (SRNC) node.

1           24. The radio access network of claim 21, wherein the first selected parameter is  
2 included in a mobile terminal global identity information element of the omnibus  
3 release message.

1           25. The radio access network of claim 24, wherein the first selected parameter is  
2 included in a Radio Network Temporary Identity (U-RNTI) information element of the  
3 omnibus release message.

1           26. The radio access network of claim 25, wherein the first selected parameter is  
2 in a Serving Radio Network Temporary Identity (S-RNTI) information element of the  
3 omnibus release message.

1           27. The radio access network of claim 20, wherein when a first selected  
2 parameter of the omnibus release message has a first predetermined value and a second  
3 selected parameter of the omnibus release message has a second predetermined value,  
4 all radio connections in cells controlled by the radio network control (RNC) node are  
5 released.

1           28. The radio access network of claim 27, wherein when the first selected  
2 parameter is in a first reserved range of values, all radio connections in cells controlled  
3 by the radio network control (RNC) node are released.

1           29. The radio access network of claim 27, wherein when the second selected  
2 parameter is in a second reserved range of values, all radio connections in cells  
3 controlled by the radio network control (RNC) node are released.

1           30. The radio access network of claim 27, wherein the radio network control  
2 (RNC) node is a drift radio network control (DRNC) node, and wherein the drift radio  
3 network control (DRNC) node prepares the omnibus release message upon failure of  
4 the drift radio network control (DRNC) node.

1           31. The radio access network of claim 27, wherein the first selected parameter is  
2 included in a mobile terminal global identity information element of the omnibus  
3 release message.

1           32. The radio access network of claim 31, wherein the first selected parameter is  
2 included in a Radio Network Temporary Identity (U-RNTI) information element of the  
3 omnibus release message.

1           33. The radio access network of claim 32, wherein the first selected parameter is  
2 in a Serving Radio Network Temporary Identity (S-RNTI) information element of the  
3 omnibus release message.

1           34. The radio access network of claim 27, wherein the second selected  
2 parameter is included in a parameter which identifies a serving radio network control  
3 (SRNC) node.

1           35. The radio access network of claim 20, wherein the omnibus release message  
2 is transmitted on a common control channel (CCCH) when a mobile terminal is in a  
3 CELL\_FACH state.

1           36. The radio access network of claim 20, wherein the omnibus release message  
2 is transmitted on a paging channel (PCH).

1           \*37. The radio access network of claim 20, further comprising a serving radio  
2 network controller node and a drift radio network controller node, and wherein the  
3 serving radio network controller node sends to the drift radio network controller node a  
4 request for release of connections with mobile terminals controlled by the serving radio  
5 network controller node in cells controlled the drift radio network controller node; and  
6 wherein the drift radio network controller node sends the omnibus release message to  
7 base station(s) controlled by the drift radio network controller node.

1           38. The radio access network of claim 20, further comprising a serving radio  
2 network controller node and a drift radio network controller node, wherein the drift  
3 radio network controller node receives an indication of a loss of connection with the  
4 serving radio network controller node, and thereafter sends the omnibus release

5 message to base station(s) controlled by the drift radio network controller node with  
 6 respect to connections with mobile terminals controlled by the serving radio network  
 7 controller node in cells controlled the drift radio network controller node.

1       39. A radio network control (RNC) node of a radio access network of a  
 2 telecommunications system which prepares a omnibus release message to release plural  
 3 connections handled by the radio access network.

1       40. The radio network control (RNC) node of claim 39, wherein when a first  
 2 selected parameter of the omnibus release message has a predetermined value, all radio  
 3 connections controlled by the radio network control (RNC) node are released.

1       41. The radio network control (RNC) node of claim 40, wherein when the first  
 2 selected parameter is in a reserved range of values, all radio connections controlled by  
 3 the radio network control (RNC) node are released.

1       42. The radio network control (RNC) node of claim 41, wherein the radio  
 2 network control (RNC) node is a serving radio network control (SRNC) node, and  
 3 wherein the serving radio network control (SRNC) node prepares the omnibus release  
 4 message upon failure of the serving radio network control (SRNC) node.

1       43. The radio network control (RNC) node of claim 38, wherein the first  
 2 selected parameter is included in a mobile terminal global identity information element  
 3 of the omnibus release message.

1       44. The radio network control (RNC) node of claim 43, wherein the first  
 2 selected parameter is included in a Radio Network Temporary Identity (U-RNTI)  
 3 information element of the omnibus release message.

1       45. The radio network control (RNC) node of claim 44, wherein the first  
 2 selected parameter is in a Serving Radio Network Temporary Identity (S-RNTI)  
 3 information element of the omnibus release message.

1       46. The radio network control (RNC) node of claim 39, wherein when a first  
 2 selected parameter of the omnibus release message has a first predetermined value and

3 a second selected parameter of the omnibus release message has a second  
4 predetermined value, all radio connections in cells controlled by the radio network  
5 control (RNC) node are released.

1 47. The radio network control (RNC) node of claim 46, wherein when the first  
2 selected parameter is in a first reserved range of values, all radio connections in cells  
3 controlled by the radio network control (RNC) node are released.

1 48. The radio network control (RNC) node of claim 46, wherein when the  
2 second selected parameter is in a second reserved range of values, all radio connections  
3 in cells controlled by the radio network control (RNC) node are released.

1 49. The radio network control (RNC) node of claim 46, wherein the radio  
2 network control (RNC) node is a drift radio network control (DRNC) node, and  
3 wherein the drift radio network control (DRNC) node prepares the omnibus release  
4 message upon failure of the drift radio network control (DRNC) node.

1 50. The radio network control (RNC) node of claim 46, wherein the first  
2 selected parameter is included in a mobile terminal global identity information element  
3 of the omnibus release message.

1 51. The radio network control (RNC) node of claim 50, wherein the first  
2 selected parameter is included in a Radio Network Temporary Identity (U-RNTI)  
3 information element of the omnibus release message.

1 52. The radio network control (RNC) node of claim 51, wherein the first  
2 selected parameter is in a Serving Radio Network Temporary Identity (S-RNTI)  
3 information element of the omnibus release message.

1 53. The radio network control (RNC) node of claim 46, wherein the second  
2 selected parameter is included in a parameter which identifies a serving radio network  
3 control (SRNC) node.

1           54. The radio network control (RNC) node of claim 39, wherein the omnibus  
2 release message is transmitted on a common control channel (CCCH) when a mobile  
3 terminal is in a CELL\_FACH state.

1           55. The radio network control (RNC) node of claim 39, wherein the omnibus  
2 release message is transmitted on a paging channel (PCH).

1           56. The radio network control node of claim 39, wherein the radio network  
2 control node is a drift radio network control node which receives from a serving radio  
3 network control node a request for release of connections with mobile terminals  
4 controlled by the serving radio network controller node in cells controlled the drift  
5 radio network controller node; and wherein the drift radio network controller node  
6 sends the omnibus release message to base station(s) controlled by the drift radio  
7 network controller node.

1           57. The radio network control node of claim 39, wherein the radio network  
2 control node is a drift radio network control node which receives an indication of a loss  
3 of connection with the serving radio network controller node, and which thereafter  
4 sends the omnibus release message to base station(s) controlled by the drift radio  
5 network controller node with respect to connections with mobile terminals controlled  
6 by the serving radio network controller node in cells controlled the drift radio network  
7 controller node.

1           58. A mobile terminal which, upon receipt of a release message from a radio  
2 access network of a telecommunications system, releases its radio connection with the  
3 radio access network when a first selected parameter of the omnibus release message  
4 has a predetermined value which is not unique to the mobile terminal.

1           59. The mobile terminal of claim 58, wherein when the first selected parameter  
2 is in a reserved range of values, the mobile terminal releases its radio connection with  
3 the radio access network.

1           60. The radio access network of claim 58, wherein the first selected parameter is  
2 included in a mobile terminal global identity information element of the omnibus  
3 release message.



1           61. The mobile terminal of claim 58, wherein the first selected parameter is  
2 included in a Radio Network Temporary Identity (U-RNTI) information element of the  
3 release message.

1           62. The mobile terminal of claim 61, wherein the first selected parameter is in a  
2 Serving Radio Network Temporary Identity (S-RNTI) information element of the  
3 release message.

1           63. The mobile terminal of claim 58, wherein the release message is received  
2 on a common control channel (CCCH) when the mobile terminal is in a CELL\_FACH  
3 state.

1           64. The mobile terminal of claim 58, wherein the release message is received on  
2 a paging channel (PCH).